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TITLE: Continuous preparation method of nanocomposite by supercritical fluid

INVENTOR: KIM, M H; KWAK, M H ; LEE, B G ; LEE, I S ; LEE, M H

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PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
KR 428635 B	April 30, 2004	N/A	000	B82B 003/00
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BASIC-ABSTRACT:

NOVELTY - A method for continuously preparing a nanocomposite is provided to control dispersion of the composition as desired under regulation of pressure change within a continuous mixer and admixing degree by using a supercritical fluid and a melt compounding approach.

DETAILED DESCRIPTION - The method in principle comprises intercalating a melt polymer chains into a laminated clay compound and mechanically blending the intercalated material to form nanocomposites. The composite is an organic laminated clay compound dispersed in a polymer medium. The method comprises particularly steps of introducing the polymer medium and the clay compound into a continuous admixer (1) consisting of a solvent inlet (2), a solvent recovering part or a deaeration part (5); introducing a low molecular weight solvent (3) into the admixer to mix the polymer medium and the clay compound (4); and recovering all and/or part of the low molecular weight solvent (6).